

### **Construction at the Ballinger Way Portal**

In response to continued growth in our region, King County is building Brightwater, a new wastewater treatment system to serve north King and south Snohomish counties. Brightwater construction began in 2006 and is expected to be completed in 2010. Construction is centered at five sites: the treatment plant site north of Woodinville; and four portals in Bothell, Shoreline, Kenmore, and at Point Wells in unincorporated Snohomish County.

One of these portal sites is located along Ballinger Way, just west of the 19th Avenue NE intersection in Shoreline.

#### **Brightwater portals and pipelines:** To

limit construction at the surface, the pipes that bring wastewater to the treatment plant and treated wastewater to Puget Sound are being built below ground in tunnels 40 to 400 feet deep using large tunnel boring machines (TBMs). Portals are the access shafts where workers, machines, soil and equipment will enter and exit the tunnels during construction.

The Ballinger Way Portal is a "receiving" portal, which means that TBMs will not be launched from this site.

Instead, two TBMs—one coming from Point Wells to the west and another from Kenmore to the east—will be pulled from the ground here after tunneling is complete.

**Summer 2007 Portal site work:** Construction
at the Ballinger site began
this summer. Current
work at the site includes
grading, and installation of
utilities and trailers. This
is in preparation for portal
construction.

What's next? Portal construction: King County's contractor will use ground freezing to construct the 25-foot diameter, 200-foot deep TBM retrieval shaft. Ground freezing involves installing a series of narrow, deep wells dug around the perimeter of the portal shaft. These wells are then lined and filled with a freezing saltwater brine. The brine is continuously circulated through an above-ground refrigeration unit and the below ground system of wells. This method keeps the ground frozen to create structural support for shaft excavation. Steel, concrete and wood supports will be installed along the face of the wall as a liner.

When shaft construction is completed in late 2008, the site will be inactive until the two TBMs arrive from Kenmore and Point Wells and are removed from the shaft. TBM removal is expected to be done by late 2009. The shaft will then be sealed.

**Permanent Facilities:** After all of the underground work is completed, an odor control facility will be built. This one-story structure will be about 300 square feet in area and 15 feet tall. It will be attractively designed and landscaped.

# What can you expect during construction?

King County is committed to being a good neighbor and will work to minimize impacts to nearby businesses and residences during construction. During construction, neighbors may experience increased truck traffic, construction noise, and potential vibrations, particularly during shaft excavation. Work hours at the site will be from 7:00 a.m. to 10:00 p.m. weekdays and Saturday from 9:00 a.m. to 10:00 p.m.

To minimize potential impacts, King County will implement a traffic management plan approved by the City of Shoreline, adhere to all city requirments, control erosion, and make sure that trucks do not track dirt or mud from the site.



Department of Natural Resources and Parks Wastewater Treatment Division

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Alternative formats are available upon request. Please

C3|| 206-684-6799 or 711 TTY.

See inside: Ballinger Way Portal Construction

## Want to learn more? Sign up for construction updates

This notice has been sent to residences and businesses around the Ballinger portal site and to people who have requested information about the project. If you want to continue to get updates about the project and are not already on our mail or email list, please visit the project Web site to learn more about Brightwater and to sign up for construction update:

http://dnr.metrokc.gov/WTD/brightwater/construction/

For construction-related questions and urgent issues, contact the 24-hour construction line at 206-205-5989 (dial 911 for emergencies)

For general questions and information about Brightwater call 206-684-6799, or 711 for TTY access, or email us at: brightwater@metrokc.gov

